cause struck me. The Danainae males need to ingest pyrrolizidine alkaloids to synthesize metabolically the sex pheromones necessary for successful courtship. These are not present in the larval host plants (Asclepiadaceae) so the first activity of a newly hatched male will be to find plants that contain the appropriate alkaloids; such plants are scattered over the plant kingdom, but even within a given genus, only some species are used. *Heliotropium* (Boraginaceae) and *Crotalaria* (Fabaceae) are common alkaloid sources, and dried parts or upturned roots are most attractive. The Danainae are quite willing to seek out pyrrolizidine compounds wherever they occur. They can be lured in numbers by hanging up baits of dried Heliotrope and in Bangladesh I saw at least seven different *Euploea* of several species coming to a dead *Tirumala agleoides*.

I immediately went off to gather a sample of the droppings for analysis, but it was six kilometres away in featureless sub-desert, and I could not find the exact spot again. The gemsbok that left its droppings might have been foraging on such pyrrolizidine-rich plants. The alkaloids were probably not absorbed by its digestive system and the dry dropping might even have had an unusually high pyrrolizidine content. The fact that all the *Danaus chrysippus* in the picture are quite fresh lends further support to this explanation.

However, there are also two counter-indications. First, pyrrolizidine alkaloids are known to be serious toxins that cause death in domestic grazers, though usually avoided (Mark Williams pers. comm.. Second, the gemsbok is essentially a grazer, and no grass is known to contain pyrrolizidine alkaloids. However, gemsbok stomach content has been found to contain up to 17% non-grass dry matter, so the possibility still remains. Should anyone ever be in my situation, please make sure that a sample of the droppings are collected for analysis.— TORBEN B. LARSEN, UNDP Vietnam, c/o Palais des Nations, 1211 Geneva 10, Switzerland (E-mail: torbenlarsen@netnam.vn).

Chrysodeixis eriosoma (Doubleday, 1843) (Lep. : Noctuidae) in Hampshire

In October 2002 I was brought a larva which was found by Adrian Butterworth of Brockenhurst in a bunch of *Chrysanthemum* bought for his wife. The flowers had been purchased locally in the New Forest. When I received the larva, which was green and obviously a plusiid, it was preparing to pupate. This it did in an extensive, tough, greyish spinning on the underside of a leaf of the foodplant. It duly emerged on 1 November 2002 and proved to be a *Chrysodeixis* species. I had previously bred a short series of *Chrysodeixis chalcites* (Esper) and also have two wild caught specimens in my collection. I did not think this insect was *chalcites* and initially thought it might be *C. acuta* (Walker), which I only knew from the literature. When I showed the moth to Bernard Skinner he considered it was a dark *chalcites* and certainly not *acuta*.

During 2004, I had the pleasure of meeting Michael Fibiger, by chance, in Lappland and during our conversation he told me of a third species in the genus, *C. eriosoma,* which was turning up in Europe. I subsequently visited the Natural

History Museum, London where Martin Honey very kindly helped to confirm that this moth is almost certainly a male *C. eriosoma*. It has slightly narrower forewings than *chalcites* and is generally darker with less reflective gold scales. It also has the two gold spots on the forewing fused together although this is a character which seems to occur occasionally in both species and is not typical of *eriosoma*.

There are problems associated with this taxon, however. No clear distinction in genitalia has been identified and for this reason my specimen has not been dissected, but is identified on superficial characteristics. The museum holds an extensive series of *chalcites* and *eriosoma* and there is clearly overlap with some specimens being superficially indistinguishable from some in the other taxon. In series, however the taxa are distinct and the specimen in question closely resembled a number of *eriosoma* and did not resemble any of the *chalcites* so closely. The type locality for *eriosoma* is New Zealand and it has an Oriental-Pacific and Australian distribution. In the case of *chalcites* the type locality is Italy and it has an African-western Palaearctic distribution. The specific distinctness of the two insects is unclear. It seems that *eriosoma*, which is a common species in the Far East, may eventually prove to be the eastern expression, as a vicariant sibling species, of *chalcites* which is essentially western. *Chrysodeixis acuta* on the other hand is quite distinct.

In many parts of the World this species, which is known as the green garden looper, is considered a pest. It is a general feeder and attacks a range of vegetable and ornamental crops including chrysanthemum and orchids.

Turning to the question of what it was doing in Brockenhurst, it is possible that it has arrived in Europe as a consequence of horticultural trade and it could have been imported to England with flowers. The origin of the flowers containing this larva is not known. In any case it seems extremely unlikely that the moth could arrive here without artificial assistance. The species has been continuously present in the 'Alaris-Schmetterlingspark' at Luther-stadt, Wittenberg in Germany since 1998, when they were apparently unintentionally introduced with imported plants. The species was first recorded in Sweden when a female specimen was hatched indoors from an orchid bought in December 2002 in Kalmar, in the province of Småland in south-eastern Sweden (Palmqvist, 2003. Intressanta fynd av storfjärilar (Macrolepidoptera) I Sverige 2002. *Entomologisk Tidskrift* **124**(1-2): 47-58). This specimen was originally reported as *C. acuta* and corrected when a good female genitalia illustration of *acuta* became available (in Goater, Ronkay & Fibiger, 2003. *Catocalinae & Plusiinae* in *Noctuidae Europaeae*, **10**: 183). The determination as *eriosoma* was checked by Michael Fibiger.

Chrysodeixis chalcites has been more regularly recorded in the United Kingdom in recent years and the main purpose of this note is to draw attention to the existence of this further species so that suspected *chalcites* and *acuta* may be critically examined in future.

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